[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1040; Directorate Identifier 2012-NM-029-AD; Amendment 39-17330; AD 2013-02-09]

RIN 2120-AA64

Airworthiness Directives; BAE SYSTEMS (OPERATIONS) LIMITED Airplanes **AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146, and Avro 146-RJ series airplanes. This AD was prompted by a report of loss of the end caps on the anti-icing piccolo tube of the wing leading edge. This AD requires a detailed inspection of the end caps on the anti-icing piccolo tube for lost or loose end caps, and replacing or repairing the end caps if necessary. We are issuing this AD to detect and correct lost and loose end caps on the anti-icing piccolo tube, and ice accretion on the wing leading edge or run-back ice, which could lead to a reduction in the stall margin on approach and loss of controllability of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the <u>Federal Register</u> on October 4, 2012 (77 FR 60651). That NPRM proposed to correct an unsafe condition for the specified products. The Mandatory Continuing Airworthiness Information (MCAI) states:

An operator reported the loss of the wing leading edge anti-icing piccolo tube end caps on two aircraft. This was discovered during routine zonal inspections when the wing tips were removed. The loss of the end cap would result in a reduction in anti-icing efficiency, over the outboard portion of the leading edge of that wing, affecting approximately 25% of the wingspan towards the wing tip.

The System Safety Analysis (SSA) classifies the loss of anti-icing of both of the outer wings as hazardous if the loss is not indicated to the crew. The loss of a piccolo tube end cap would not be indicated to the flight crew and, therefore, this reduction in anti-icing capability on one wing must also be classified as hazardous.

This condition, if not detected and corrected, could result in ice accretion on the wing leading edge, or run-back ice and could lead to a reduction in the stall margin on approach together with a reduction in roll control authority.

For the reasons described above, this [European Aviation Safety Agency (EASA)] AD [2012-0003, dated January 6, 2012] requires a one-off [detailed] inspection [for lost and loose end caps] of the piccolo tube end caps. The results of this inspection will be used to establish a suitable repeat inspection period, which will be introduced through the Maintenance Review Board (MRB) process.

The corrective action is replacing or repairing the end caps if necessary. You may obtain further information by examining the MCAI in the AD docket.

Clarification of "No Reporting Requirement" Paragraph

Paragraph (i) of the NPRM (77 FR 60651, October 4, 2012) refers to EASA AD 2012-0003, dated January 6, 2012. However, we have revised paragraph (i) of this AD to refer to BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011, because that service bulletin is the appropriate source of service information for doing the actions required by this AD.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 60651, October 4, 2012) or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed–except for minor editorial changes and clarification of paragraph (i) of this AD. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 60651,
 October 4, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 60651, October 4, 2012).

Costs of Compliance

We estimate that this AD will affect 2 products of U.S. registry. We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD to the U.S. operators to be \$340, or \$170 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority

because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 60651, October 4, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office

(telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2013-02-09 BAE SYSTEMS (OPERATIONS) LIMITED: Amendment 39-17330.

Docket No. FAA-2012-1040; Directorate Identifier 2012-NM-029-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all BAE SYSTEMS (OPERATIONS) LIMITED Model BAe 146-100A, -200A, and -300A airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A airplanes; certificated in any category; all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and rain protection.

(e) Reason

This AD was prompted by a report of loss of the end caps on the anti-icing piccolo tube of the wing leading edge. We are issuing this AD to detect and correct lost and loose end caps on the anti-icing piccolo tube, and ice accretion on the wing leading edge or run-back ice, which could lead to a reduction in the stall margin on approach and loss of controllability of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Inspection

Within 12 months after the effective date of this AD: Do a detailed inspection of the end caps on the anti-icing piccolo tube for lost and loose end caps, in accordance the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011.

(h) Corrective Action

If, during the detailed inspection required by paragraph (g) of this AD, a lost or loose end cap of the anti-icing piccolo tube is found: Before next flight, replace the end cap, in accordance the Accomplishment Instructions of BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011, or repair in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or the European Aviation Safety Agency (EASA) (or its delegated agent).

(i) No Reporting Requirement

BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011, specifies a reporting requirement; this AD does not require reporting.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

Information may be emailed to: <u>9-ANM-116-AMOC-REQUESTS@faa.gov</u>. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(k) Related Information

Refer to MCAI EASA Airworthiness Directive 2012-0003, dated January 6, 2012; and BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011; for related information.

(1) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) BAE SYSTEMS (OPERATIONS) LIMITED Inspection Service Bulletin ISB.30-025, dated April 19, 2011.
 - (ii) Reserved.

(3) For service information identified in this AD, contact BAE SYSTEMS (OPERATIONS) LIMITED, Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone +44 1292 675207; fax +44 1292 675704; email RApublications@baesystems.com; Internet http://www.baesystems.com/Businesses/RegionalAircraft/index.htm.

(4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on January 16, 2013.

Michael Kaszycki, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-01819 Filed 01/31/2013 at 8:45 am; Publication Date: 02/01/2013]